

WHAT IS CLAIMED IS:

1. A method for minimizing an amount of data needed to test a geometry chunk in a frame against subarea boundaries in a compositing window, comprising the steps of:

defining the geometry chunk with a bounding region, wherein said bounding region defines the space the geometry chunk occupies on the compositing window;

sending said bounding region to each of the subareas to determine which subarea will render the geometry chunk defined by said bounding region; and

communicating the geometry chunk to the subarea that will render the geometry chunk.

2. The method of claim 1, wherein the geometry chunk is comprised of one or more pieces of geometry provided by a graphics application.

3. The method of claim 1, wherein said space is screen space.

4. The method of claim 1, wherein said space is world space.

5. The method of claim 1, wherein said space is object space.

6. The method of claim 1, wherein said step of defining the geometry chunk with said bounding region only occurs if said bounding region has not already been defined for the geometry chunk in a previous frame.

7. The method of claim 1, further comprising the step of assigning graphic units to subareas of the compositing window, wherein no graphics unit is assigned to more than one subarea.

8. The method of claim 1, wherein the geometry chunk is represented as a display list.

9. The method of claim 1, wherein the geometry chunk is represented as a vertex array object.

10. The method of claim 1, wherein the geometry chunk is represented as buffered vertices.

11. A system for minimizing an amount of data needed to test a geometry chunk in a frame against subarea boundaries in a compositing window, comprising:

a geometry distributor that defines a bounding region for the geometry chunk, wherein said bounding region defines the space the geometry chunk occupies on the compositing window; and

one or more graphics units, wherein said graphics units are assigned to the subareas in the compositing window, wherein said geometry distributor sends said bounding region to each of said one or more graphics units to determine which graphics unit will render the geometry chunk defined by said bounding region; and wherein said geometry distributor communicates the geometry chunk to said graphics unit that will render the geometry chunk.

12. The system of claim 11, further comprising a graphics application that provides the geometry chunk to said geometry distributor.

13. The system of claim 12, wherein said geometry distributor comprises a virtual graphics unit that interfaces with said graphics application.

14. The system of claim 11, wherein the geometry chunk is comprised of one or more pieces of geometry provided by a graphics application.

15. The system of claim 11, wherein said space is screen space.

16. The system of claim 11, wherein said space is world space.

17. The system of claim 11, wherein said space is object space.

18. The system of claim 11, wherein said geometry distributor comprises:

a bounding region calculator that calculates said bounding region for the geometry chunk;

a graphics unit assignor that assigns said graphics units to the subareas in the compositing window; and

a graphics unit distributor that distributes the geometry chunk to the appropriate graphics unit.

19. The system of claim 11, wherein the geometry chunk is represented as a display list.

20. The system of claim 11, wherein the geometry chunk is represented as a vertex array object.

21. The system of claim 11, wherein the geometry chunk is represented as buffered vertices.